THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY AND EXHIBITS

OF

DOUGLAS H. CARLISLE, JR.

November 8, 2006

DOCKET NO. 2005-13-WS

Wyboo Plantations Utilities, Inc
Application for Adjustment of Rates and Charges

TESTIMONY OF DOUGLAS H. CARLISLE, JR.

FOR

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2005-13-W/S

IN RE: WYBOO PLANTATION UTILITIES, INC.

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Douglas H. Carlisle, Jr. I am the Economist at the South Carolina Office of Regulatory Staff ("ORS"). My business address is 1441 Main Street, Suite 300, Columbia, South Carolina 29201.

Q. WOULD YOU PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND YOUR BUSINESS EXPERIENCE?

A. I received a Bachelor of Arts from Brown University, a Masters Degree in Public Administration from the University of Virginia, and a Ph.D. in Government and International Relations also from the University of Virginia. Before joining ORS, I worked five years for the State Chief Economist as an analyst in the Economist Research Section and as an adjunct to the Board of Economist Advisors. Before then, I was employed by the South Carolina House Education & Public Works Committee and earlier by the State Reorganization Commission, which functioned as an audit follow-up entity. Prior to my work for the State I was a market consultant and an instructor at Midlands Technical College. I also worked as an evaluator and evaluator-in-charge for 7½ years at the United States Government Accountability Office in Washington, D.C.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My purpose is to identify the appropriate range of return on operating margin for Wyboo Plantations, Inc. ("Wyboo" or "the Company").

Q. WHAT METHOD DID YOU USE TO DETERMINE A RETURN FOR WYBOO?

A. Wyboo is a highly leveraged company, with a large loan on which no payments on the principal are due until September 29, 2008. The immediate financial concern of the Company, therefore, is to ensure that it has adequate revenue to pay its interest payments. Although usual economic analyses, such as a determination of return on equity or analyses of bonded indebtedness, do not apply, I calculated the Company's debt coverage ratio to determine if it was in the range of 9-16% that has been approved in the past by this Commission.

A generally accepted method for comparing margin returns does not exist but some proxies are available. One of my sources for reviewing debt service coverage ratios is Moody's Investors Service. Moody's primary business is rating various companies' ability to cover the cost of bonded indebtedness. For state and local toll bonds, Moody's recommends coverage ratios between 1.25 and 1.1 for lower-rated investment-grade bonds (source reference, Exhibit DHC-1, excerpt at Exhibit DHC-3). The National Regulatory Research Institute cites debt coverage for the Rate Commission of the Metropolitan St. Louis Sewer District ranging from 1.25 to 1.15, depending on how secured the debt was (source reference, Exhibit DHC-1, excerpt at Exhibit DHC-4). In

Rhode Island, the Narragansett Bay Commission (NBC), a water utility, sought and received rates in 2002 sufficient to maintain a coverage ratio over 1.25 in order to maintain its "A" rating (excerpt at Exhibit DHC-5, source reference, Exhibit DHC-1). The same year, Dale Service Corporation, a Virginia water utility, received a margin not to exceed a 1.2 ratio (source reference, Exhibit DHC-1, excerpts from order at Exhibit DHC-6). While none of these instances of criteria or practice is exactly analogous to Wyboo, they shed light on the appropriate range for Wyboo.

Q. WOULD YOU PLEASE SUMMARIZE YOUR RECOMMENDATION FOR RETURN ON OPERATING MARGIN?

A. ORS has recommended or agreed to operating margins in the general range of 9-16% in water cases since the agency's inception. It is my judgment that a margin slightly higher than the midpoint of this range would be appropriate, producing between $260,578 and $263,654 additional revenue for the Company, resulting in total revenues of $439,994 to $443,070, including ORS's pro forma adjustments. A debt coverage ratio, ranging from 1.15 to 1.2, results in a margin return from 12.65 to 13.14, which is about the midpoint of ORS's previous recommendations and agreements and is consistent with the risk indicated by the terms of Wyboo's loan (Exhibit DHC-2).

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Wyboo Plantations Utilities, Inc.
Documents Cited and Sources

1. Excerpt in Exhibit DHC-3
"Moody's Rating Methodology for State and Local Government Owned Toll Facilities in the United States"

www.ibtta.org/files/pdfs/Moodys Toll Methodology-2006.pdf

2. Excerpt in Exhibit DHC-4
The National Regulatory Research Institute, "Orientation on Ratemaking Topics and Issues: the Rate commiswsion of the Metropolitan St. Louis Sewer District, March 29, 2005," p.46.

http://www.msd.st-louis.mo.us/Govern/RateComm/RateCommOrient/Introduction%20to%20Ratemaking%20(MSD).pdf

3. Excerpt in Exhibit DHC-5
State of Rhode Island and Providence Plantations Public Utility Commission: Narragansett Bay Commission Abbreviated Rate Application, Docket No. 3409

http://www.ripuc.org/eventsactions/orders/3409_NBCOrd17304.pdf

4. Excerpt in Exhibit DHC-6
Dale City Service Corp.

Document List For Case Number : PUE-2001-00200, at

http://docket.scc.virginia.gov:8080/vaprod/main.asp

http://docket.scc.state.va.us:8080/CyberDocs/Libraries/Default_Library/Common/frameviewdsp.asp?doc=27983&lib=CASEWEBP%5FLIB&mimetype=application%2Fpdf&rendition=native

Revenue Based upon 9-16% ORS Range & Debt Coverage Method

		Revenue after Pro Forma Adj't + Income to Bring Loss to 0 + Margin	Recommended Increase in Operating Rev. with Pro Forma Adjustments
Debt Service	$51,931		
Total Loss or Income for Return	-$142,760		
Total Operating Revenues	$179,416		
Net Operating Rev. w/o Loss @ 1.15	$187,206		
Net Operating Rev. w/o Loss @ 1.2	$189,802		
Total Operating Revenue @ 1.15 Ratio	$59,721	$433,828	$254,412
Grossed-up for Taxes		$439,994	$260,578
Total Operating Revenue @ 1.20 Ratio	$62,317	$436,424	$257,008
Grossed-up for Taxes		$443,070	$263,654
Total Operating Expenses per ORS			
with 1.15 coverage		$332,406	
with 1.2 coverage		$332,914	

		Income for Return	Income for Return, less Interest Expense
Calculations @ 1.15 coverage		$107,589	$55,658
Calculations @ 1.2 coverage		$110,156	$58,225
Net Operating Income to Debt Service			
Margin @ 1.15 coverage =	12.65%		
Margin @ 1.2 coverage =	13.14%		

Exhibit DHC-3
Page 1 of 2

Contact	Phone
New York	
Public Infrastructure Finance	
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Moody's Rating Methodology for State and Local Government Owned Toll Facilities in the United States

Summary

This methodology report provides a detailed explanation of how Moody's assigns debt ratings for state and local government-owned toll facilities in the United States (U.S.). The methodology applies only to toll facilities currently in operation and does not include projects under construction.

The report first provides an overview of the U.S. government-owned toll facility sector and discusses the trends shaping credit for toll facilities today and over the next several years. Next, it explains our rating methodology and discusses each of the key credit factors and sub-factors in greater detail as well as why they are important, how we measure them, and the ways in which they help explain Moody's ratings. These factors are:

- Market position
- Governance and management
- Financial position and performance
- Debt and capital plan
- Covenants and legal framework

The report also includes a discussion of how external government support or interference may serve to lift or depress ratings.

The appendices include Moody's U.S. toll facility sector medians, which we use as benchmarks in assigning ratings, and additional information about our financial and operating ratios for toll facilities. Also included are our rating definitions and a list of toll facility ratings.

Rate covenant. The rate covenant is a legal pledge to set toll rates and other revenues at a level sufficient to achieve a certain coverage ratio for both operating expenses and debt service. If the coverage ratio falls below this level, the rate covenant will typically require the debt issuer to increase rates to ensure compliance. At the higher rating levels (A and above) rate covenants tend to be stronger-above 1.5 times coverage of annual debt service by net revenues for toll facilities; however, start-up facilities with a weak market position may require stronger covenants just to achieve investment grade ratings.

Additional bonds test. This test, commonly referred to as the ABT, requires the toll facility to demonstrate that revenues, typically net revenues, are sufficient to support future debt issues. The strongest additional bonds tests are based on actual revenues collected over a specified period of years. Many ABTs include a prospective test based on projected future revenues, including the impact of scheduled future toll rate increases. As with the rate covenant, Moody's prefers to see stronger ABTs-above 1.5 times--for higher rating levels, and sometimes these stronger covenants may make the difference between an investment rating or not.

Debt service and other reserves. Most U.S. toll facilities have a 12-month debt service reserve, regardless of rating level. Debt service reserves are especially important for weak toll facilities or for single asset or start-up projects where market demand and toll revenues are unproven. Other operating and capital maintenance reserves range from upwards of 9 months for toll facilities in the Aa range to less than one month for very weak facilities. Moody's views these reserves as critically important in allowing toll facilities to weather economic downturns or traffic and revenue disruptions due to unforeseen events. For example, in the wake of Hurricane Katrina, the single asset Greater New Orleans Expressway Commission was shut down and then re-opened for several weeks as a toll free emergency access route. Nevertheless, the Commission retained its A2 rating due in large part to its strong balance sheet and ability to pay O&M and debt service from available reserves, until it reopened as a commercial facility.

Covenants and Legal Framework

Sub-Factors	Aaa	Aa	A	Baa	Ba	B	Caa
a) Security pledge and flow of funds	Gross or net revenue pledge of all assets; closed loop	Gross or net revenue pledge of all assets; closed loop or very limited outflow to non-core enterprises	Gross or net revenue pledge of all assets with limited outflow to non-core enterprises	Gross or net revenue pledge of all assets with outflow to non-core enterprises	Gross or net revenue pledge of all assets with outflow to non-core, non-self-supporting enterprises, or out of system	Gross or net revenue pledge of all assets with substantial outflow outside of system projects	Gross or net revenue pledge of all assets with heavy outflow to non-system projects
b) Rate covenant and additional bonds test	>3x coverage of debt service by net revenues	>1.5 coverage of debt service by net revenues		>1.25x coverage of debt service by net revenues	>1.1x coverage of debt service by net revenues		>1.0x coverage of debt service by net revenues
d) Debt service and other reserves	12 months DSRF or greater; >12 months operating reserve; capital maintenance reserve	12-month DSRF; >9 months operating reserve; capital maintenance reserve	12-month DSRF; >6 months operating reserve; capital maintenance reserve	12-month DSRF; <6 months operating reserve; capital maintenance reserve	12-month DSRF; >3 months operating reserve; capital maintenance reserve	DSRF tapped; <3 months operating and maintenance reserves	DSRF depleted; no operating or maintenance reserves

nrri
National Regulatory Research Institute

Orientation on Ratemaking Topics and Issues

The Rate Commission of the Metropolitan St. Louis Sewer District

March 29, 2005

The National Regulatory Research Institute

Exhibit DHC-4
Page 2 of 4

Debt Coverage (DC)

- Definition: the ratio of net revenues available for debt service (NR) to the average annual debt-service requirements of a utility (DS)
- Thus, DC = NR/DS
- Example: a utility with debt service of $10 million and net revenues of $15 million has debt coverage of 1.5

Debt Coverage (DC) -- *continued*

- DC is a measure of the utility's ability to pay back the interest and principal on its loans (typically a requirement specified in the covenants of revenue bonds)
- Unlike investor-owned utilities, publicly-owned entities (POEs) are not governed by rate base and return on rate base
- Rates for POEs should allow them the opportunity to earn sufficient "profits" to allow them to attract capital necessary to render service to the public

Debt Coverage (DC) -- *continued*

- DC determines the POE's ability to
  - Maintain its financial integrity (e.g., long-term solvency)
  - Attract capital at reasonable terms
- For MSD, senior debt and subordinated debt have DC requirements of 1.25 and 1.15, respectively

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

NARRAGANSETT BAY COMMISSION :
ABBREVIATED RATE APPLICATION : DOCKET NO. 3409

REPORT AND ORDER

On December 21, 2001, the Narragansett Bay Commission ("NBC") filed an abbreviated rate application with the Rhode Island Public Utilities Commission ("Commission"). The proposed rates were designed to generate total revenues of $45,467,359 and, if approved as filed, would increase NBC's present revenues by $8,834,420, or 24.9 percent across the board on tariffed rates for wastewater services. The test year utilized in the rate application was the same as the rate year approved in Order No. 16751.[1] The Commission suspended the effective date of the proposed rate increase at an open meeting on January 12, 2002.

The instant rate case filing represents NBC's third rate filing in the last eight years. The following table provides a brief history:

DOCKET NO.	DATE	REQUESTED	INCREASE ALLOWED	AUTHORIZED REVENUE
2216	6/27/94	$8,161,795	$5,332,025	$32,098,454[2]
3162	2/29/00	$10,089,441	$6,669,489	$36,632,209

[1] On December 6, 2001, NBC requested that the PUC allow NBC to use the rate year approved in Docket No. 3162 as the test year in their abbreviated rate application. On December 12, 2001, the Division of Public Utilities and Carriers ("Division") did not object to NBC's request. At an open meeting on December 13, 2001, the Commission granted NBC's request.
[2] The Commission reduced NBC's annual revenue by $1,733,272 effective on July 1, 1997.

the approved bond referendum entitled NBC to a minimum of $70,000,000 in zero interest rate loans to fund the CSO abatement project, the blended rate program would entitle NBC to a minimum of $140,000,000 in blended rate loans.[4]

In her pre-filed testimony, Ms. Maureen Gurghigian, a financial advisor to NBC, discussed NBC's request for funding debt service coverage at 125 percent of principal and interest. Ms. Gurghigian stated that over the next five fiscal years, NBC will be financing a CIP of more than $364 million. NBC's primary source of capital funding is the SRF program administered by the RICWFA. Ms. Gurghigian noted that since 1999, NBC has had an "A" published credit rating, and that generally, the higher the credit rating, the lower the interest cost to the borrower According to Ms. Gurghigian, NBC will no longer be allowed to utilize a rolling debt service coverage model; instead, coverage requirements will need to be satisfied on an annual basis to maintain favorable credit ratings. In order for NBC to maintain its favorable credit rating and avail itself of lower interest rates, NBC needs to have rates sufficient to generate coverage for 125 percent of its total debt service on an annual basis. In Ms. Gurghigian's view, without this debt service coverage ratio, NBC's credit rating could be reduced, resulting in RICWFA requiring NBC to pay higher interest rates and/or purchase insurance.[5]

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[4] NBC Ex. 2: (Simeone's testimony), pp. 2-3.
[5] NBC Ex 3: (Gurghigian's testimony), pp. 2-9.

contracts [for Phase I] plus a 10 percent contingency for the CSO construction contracts."[7]

II. DIVISION

On March 11, 2002, the Division submitted pre-filed testimony by Thomas Catlin and Alberico Mancini. In his pre-filed testimony, Mr. Catlin, a consultant to the Division, discussed NBC's proposed revenue increase. Mr. Catlin stated that NBC may need to seek additional rate relief prior to fiscal year 2004, because if all debt is issued as currently planned, the total available for debt service and coverage will fall short of 125 percent coverage requirement for fiscal year 2004 (i.e., the 12-month period ending June 30, 2004). In addition, Mr. Catlin supported NBC's request for Commission approval to allow $799,649 of funds which are currently restricted to being used only for pay-as-you-go capital outlays to be utilized prospectively first, to satisfy debt service and coverage requirements, and then for pay-as-you-go capital expenditures. Mr. Catlin agreed with Ms. Gurghigian that combining the restricted debt service and restricted capital outlays accounts for this purpose will enable NBC to maintain its favorable debt ratings by satisfying its debt service coverage requirements on an annual basis. Mr. Catlin noted that allowing restricted capital outlays funds to be used to meet debt service and coverage requirements reduced the revenue increase needed to meet NBC's coverage requirements in the current NBC rate filing by $799,649.

[7] NBC Ex. 5: (Pratt's testimony), pp. 2-6.

FOR COMMISSION: Steven Frias, Esq.
Executive Counsel

At the hearing, Mr. Edge reiterated NBC's request to utilize the pay-as-you-go capital outlays funds for debt service, noting that such a request has been granted for various water utilities.[11] Ms. Gurghigian testified that without 125 percent annual debt service coverage, NBC would either borrow less money from RICWFA or receive a lower credit rating so that its borrowing costs would increase. Mr. Edge testified that due to increases in debt service and other NBC operating expenses, NBC would need to file a rate case by the end of 2002 or in 2003.[12]

Mr. Catlin expressed support for NBC's rate increase with the condition that the connection permit fees and BOD/TSS surcharge be increased as well. NBC concurred with Mr. Catlin's modification. Also, Mr. Catlin concurred with NBC's request to utilize the restricted pay-as-you-go capital funds for debt service. Mr. Catlin estimated that in order to pay for debt service, NBC will need another 25 percent increase, and for the next two to four years, NBC will need significant rate increases.[13]

Mr. Pratt testified that the CSO (Phase I) project is currently estimated to cost $275 million plus a 10 percent contingency, for a total of $299 million. He stated that the main spine tunnel contract has been awarded to Shank/Balfour Beatty, a joint venture. Responding to concerns expressed by the Commission, Mr. Pratt noted that Balfour

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[11] Tr. 4/16/02, pp. 10-11.
[12] Id., pp. 26, 32, 49.

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

PRE-FILED STAFF TESTIMONY

APPLICATION

OF

DALE SERVICE CORPORATION

CASE NO. PUE-2001-00200

August 22, 2002

been supplied by the Company to the Industrial Development Authority of the County of Prince William. The questionnaire identifies the source of the Company's depreciation rates as the ADR mid-point life, used for tax depreciation. There is no basis for using these rates for booking or ratemaking purposes. Without data to suggest inadequacy of the historical rate as a proxy for the composite rate of all plant in service, the 3% is appropriately applied to the upgrade project.

Therefore, in Staff's going-forward depreciation expense adjustment, Staff depreciates all depreciable plant at a 3% composite rate. Staff recommends that if in the future the Company wishes to depreciate any plant at a rate different than the historical 3% composite that it file a depreciation study which supports a different rate. The adjustments to depreciation expense are reflected in Adjustment Numbers A-16 and B-16.

Q26. PLEASE DISCUSS IMPLICATIONS OF THE DEBT SERVICE COVERAGE RATIO FOR AMORTIZATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION.

A26. In the context of ratemaking, capital recovery normally occurs through annual depreciation accruals. In this case, Staff is recommending that capital recovery occur not through depreciation accruals, but rather through the debt service coverage ratio ("DSC"), which is measured on income before depreciation and interest expense. Staff Witness Ballsrud explains more about the necessity of setting rates based on a DSC. The DSC is designed to allow the Company to recover a margin above the annual bond principal and interest payments. Since debt service on the bonds is currently scheduled to occur over a 20 year period absent prepayments, setting rates on a debt service coverage

Following the adjustments enumerated in Statement 7 for Phase 2 cost of service, Staff finds that the Company's income available for common equity is ($1,384,614). The fully adjusted rate base is $18,943,780. This results in a debt service coverage ratio of 0.27, a return on rate base of -1.51%, and a rate of return on equity of –34.06%.

Q39. PLEASE DISCUSS THE REVENUE REQUIREMENT SHORTFALL STAFF PROPOSES FOR PHASE 1 AND PHASE 2.

A39. Based on the previous discussion, as well as the capital structure and return components supported by Staff Witness Ballsrud, Staff finds that the Company's implementation of $1,835,433 in additional revenues on October 1, 2001, results in a fully adjusted income available for common equity of $209,149. This yields a 0.69 debt service coverage ratio and a 5.23% rate of return on common equity. Based on these returns, Staff concludes that the Phase 1 revenue increase is not excessive.

For Phase 2, Staff finds that a 1.15 debt service coverage ratio is yielded by a combined increase in annual revenues of $3,179,827. The incremental Phase 2 revenue increase above the Phase 1 level is $1,344,394. This results in $583,219 of fully adjusted income available for equity and yields a 14.35% rate of return on equity. Staff recommends that this level of increase is just and reasonable because it allows the Company to meet its required 1.15 debt service coverage ratio based on known and measurable cost of service and debt service requirements.

It is important to note that yearly debt service requirements will decrease with annual reductions in the outstanding bonds on which interest payments are calculated. As annual debt service requirements decrease, the Company's earned DSC ratio could increase in ensuing years. In addition, customer growth and future grant proceeds could